

## CLAIMS

1. A method of originating a dispatch call over a code division multiple access (CDMA) air interface from a mobile communication device, comprising:

transmitting a dispatch call origination message from the mobile communication device to a fixed equipment network over a CDMA channel, the dispatch call origination message containing a target identifier;

in response to the transmitting, setting up a traffic channel between the mobile communication device and the fixed equipment network;

setting up a call path between the target and the fixed equipment network; and

wherein setting up the traffic channel and setting up the call path between the target and the fixed equipment network are performed concurrently.

2. A method of originating a dispatch call as defined in claim 1, wherein setting up the traffic channel between the mobile communication device and the fixed equipment network comprises setting up a communication link according to a retransmission protocol to allow retransmission of data packets over the traffic channel.

3. A method of originating a dispatch call as defined in claim 1, wherein setting up the call path between the target and the fixed equipment network comprises setting up the call path between a second mobile communication device and the fixed equipment network.

4. A method of originating a dispatch call as defined in claim 3, wherein setting up the call path between the second mobile communication device and the fixed equipment network comprises setting up the call path between a mobile communication device and the fixed equipment network over a CDMA air interface.

5. A method of originating a dispatch call as defined in claim 3, wherein setting up the call path between the second mobile communication device and the fixed equipment network comprises setting up the call path between a mobile communication device and the fixed equipment network over a time division multiple access (TDMA) air interface.

6. A method of originating a dispatch call as defined in claim 1, wherein setting up the call path between the target and the fixed equipment network comprises setting up the call path between a personal computer and the fixed equipment network over a packet network.

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7. A method of originating a dispatch call as defined in claim 1, wherein setting up the call path between the target and the fixed equipment network comprise:

routing the dispatch call origination message from a base site to a dispatch agent component of the fixed equipment network;

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determining a network location of the target at the dispatch agent;

paging the target at the network location with an incoming dispatch call message; and

responding to the incoming dispatch call message, performed by the target.

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8. A method of originating a dispatch call as defined in claim 7, wherein the step of routing the dispatch call origination message from a base site to a dispatch agent component comprises the steps of routing the dispatch call origination message from a base site to a first dispatch agent or a second dispatch agent.

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9. A method of originating a dispatch call as defined in claim 8 wherein the first dispatch agent is located within a mobile switching center.

10. A method of originating a dispatch call as defined in claim 9 wherein the second dispatch agent is not located within a mobile switching center.

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11. A method of originating a dispatch call as defined in claim 1, further comprising, upon completion of setting up the traffic channel between the mobile communication device and the fixed equipment network and setting up the call path between the target and the fixed equipment network, sending a talk permission message to the mobile communication device from the fixed equipment network.

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12. A method of setting up a dispatch call to a target mobile communication device over a code division multiple access (CDMA) air interface, comprising:

receiving a page notification from a fixed equipment network at the target mobile communication device, the page notification including a dispatch notification;

5 transmitting a page response, including a pilot power measurement; and

if the pilot power measurement indicates a power level above a preselected threshold, setting up a traffic channel between the target mobile communication device and the fixed equipment network.

10 13. A method of setting up a dispatch call to a target mobile communication device as defined in claim 12, further comprising:

prior to receiving the page notification at the target mobile communication device:

scanning the pilot signal of at least one serving cell in the vicinity of the target mobile communication device;

15 determining a strongest pilot signal and a serving cell corresponding to the strongest pilot signal; and

scanning a paging channel of the serving cell corresponding to the strongest pilot signal.

20 14. A method of setting up a dispatch call to a target mobile communication device as defined in claim 12, wherein the method is performed concurrently with fixed equipment network setting up a call path between an originating device and the fixed equipment network.

25 15. A method of setting up a dispatch call to a target mobile communication device as defined in claim 14, wherein the setting up the call path between an originating device and the fixed equipment network comprises setting up the call path between an originating mobile communication device and the fixed equipment network.

16. A method of setting up a dispatch call to a target mobile communication device as defined in claim 14, wherein the setting up the call path between an originating device and the fixed equipment network comprises setting up the call path between an originating CDMA mobile communication device and the fixed equipment network.

17. A method of setting up a dispatch call to a target mobile communication device as defined in claim 14, wherein the setting up the call path between an originating device and the fixed equipment network comprises setting up the call path between a computer and the fixed equipment network.

18. A method of setting up a dispatch call between an originating code division multiple access (CDMA) mobile communication device and a target CDMA mobile communication device, comprising:

transmitting a dispatch call origination message from the originating CDMA mobile communication device to a fixed equipment network over a CDMA channel, the dispatch call origination message containing a target identifier corresponding to the target CDMA mobile communication device;

in response to the transmitting, initiating the set up of a traffic channel between the originating CDMA mobile communication device and the fixed equipment network;

paging the target CDMA mobile communication device and the fixed equipment network; and

wherein initiating the set up of a traffic channel and paging the target CDMA mobile communication device are performed concurrently.

19. A method of setting up a dispatch call as defined by claim 18, in response to the paging, the method further comprising:

transmitting a page response, including a pilot power measurement; and

in response to transmitting the page response, transmitting a talk permission message to the originating CDMA mobile communication device from the fixed equipment network.

20. A method of setting up a dispatch call as defined by claim 19, wherein the talk permission message is transmitted to the originating CDMA mobile communication device before the traffic channel between the originating CDMA mobile communication device and the fixed equipment network is set up, the method further comprising:

alerting a user of the originating CDMA mobile communication device to begin speaking; and

buffering the speech in the originating CDMA mobile communication device until the traffic channel between the originating CDMA mobile communication device and the fixed equipment network is established; and

transmitting the buffered speech to the target CDMA mobile communication device over the fixed equipment network.